III. REMARKS/ARGUMENTS

Claims 1 and 2 have been amended. Claims 4-5, 21-22, and 26-28 stand withdrawn, and new claims 29-34 have been added. Accordingly, after entering this amendment, claims 1-34 remain pending in the application.

Withdrawn Claims

Examiner Le telephoned on December 17, 2003, to inform the undersigned that the Amendment filed on Nov. 24, 2003, would not be entered because the Amendment did not conform to 37 C.F.R. § 1.121. The claims that were withdrawn in response to the restriction requirement are Claims 4-5, 21-22, and 26-28. These claims have been reproduced, labeled as "withdrawn" and included in the above listing of claims. The Applicants gratefully acknowledge the indication by the Examiner of this error.

Rejections Under 35 USC §112

The Examiner has rejected Claim 2 under 35 U.S.C. §112, paragraph 1, for not being enabled by the specification. Claim 2 has been amended in accordance with the Examiner's suggestion. The Applicants assert that no new matter was added in amending claim 2, and therefore, respectfully request that the Examiner reconsider and withdraw this rejection under 35 U.S.C. §112, paragraph 1.

Rejections Under 35 USC §102(b)

The Examiner has rejected Claims 9 – 13 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,776,235 to Gleasman *et al.* ("Gleasman"). The

rejection cites a series of components, such as a differential (14) and first and second output shafts (16, 17) as anticipating Claims 9-13 of the present application. Claims 9-13 are method claims. Applicants respectfully assert that a number of the elements cited in the rejection are not present in the method as described in Claims 9-13. Further, the Applicants assert that Gleasman does not include each and every element of claims 9-13. Gleasman includes no reference to many of the steps of the methods of Claims 9-13.

The Applicants respectfully assert that there is a logical inconsistency in applying the reference. The rejection states that "it is inherent that Gleasman not-slip imposed differential has the ability to recognize a difference in shaft output power application and to determine whether a correction in output power is needed." Office Action, p. 5, lines 3-5. However, in another part of the Office Action rejecting other claims, the Examiner admits that Gleasman does not describe or suggest, and therefore the Gleasman reference lacks, a controller, a means for controlling and monitoring power, a means for measuring power in the first and second shafts, an inner rotor and an outer rotor. Office Action (mailed 9/24/2003), page 6, last six lines. Thus, the office action itself argues that Gleasman cannot anticipate the claimed steps of "sensing a difference in shaft output power application," and "determining whether a correction in output power is needed."

As discussed below in the rejections under 35 U.S.C. §103(a), embodiments of the present invention use sensors in "sensing a difference in shaft output power application." Specification, p. 5, lines 14-24. The rejection cites no reference for, and Gleasman does not describe or suggest, the step of "sensing a difference in shaft output power application", as recited in Claim 9. Further, the Applicants assert

that Gleasman does not recited the steps described in dependant claims 1-13 of the present application.

For these reasons, the Applicants assert that Gleasman does not anticipate or disclose the method as claimed in Claims 9-13. Accordingly, the Applicants respectfully request the Examiner reconsider and withdraw these rejections under 35 U.S.C. §102(b).

Rejections Under 35 USC §103

The Examiner has rejected Claims 1-3, 7-8, 14, 16 – 20, and 23 – 25 under 35 U.S.C. §103(a) as being anticipated by Gleasman and U.S. Patent No. 6,520,880 to Fukushima *et al* ("Fukushima").

The rejection does not list claim elements for the independent claims, but lumps the elements together on pp. 5-6 of the Office Action.

As mentioned above, the rejection admits that Gleasman does not describe or suggest, and therefore lacks, a controller, a means for controlling and monitoring power, a means for measuring power in the first and second shafts, an inner rotor and an outer rotor. Office Action (mailed 9/24/2003), page 6, last six lines. The rejection then cites Fukushima as describing these elements, citing Figs. 1-2 and col. 1, line 58, to col. 6, line 5.

The Applicants respectfully assert that at least one element of each claimed invention is not described or suggested in the combination of references. Specifically, Claim 1 of the present application claims "a controller . . . receiving inputs from at least two sensors indicative of the output power of the first and second output shafts." The rejection cites Fukushima for these sensors, col. 5, lines 50-53.

Office Action (mailed 9/24/2003), p. 7, lines 4-5. This passage in Fukushima does not concern the balance of power in the differential, but rather refers to "a vehicular-speed sensor, a steering-angle sensor, a lateral G sensor, a yaw sensor, etc." These sensors will not inherently detect a wheel slip difference "indicative of the output power of the shafts" of the claimed torque controller.

Referring to the Specification of the present application, page 5, lines 12-16: "When one wheel slips, perhaps the left wheel 16, the wheel and left half-axle 18 will begin to spin much faster, as the torque applied by the shaft and the wheel to the pavement lessens. A sensor, such as a wheel or axle speed sensor 34, detects the difference in speed between the left half-axle and the right half-axle."

Fukushima cites no other sensors, such as wheel speed sensors or axle-shaft speed sensors, and repeats this same recital at col. 9, lines 39-42. While not limited to the embodiments disclosed, the present application cites sensors that sense wheel speed, half-axle speed, and pump rotor speeds. Specification, p. 5, lines 12-16, and p. 12, lines 6-7. These sensors measure "wheel slip and thereby the relative power output of said first and second output shafts," as claimed in Claim 1. Neither Gleasman nor Fukushima describes or suggests such sensors.

Independent Claim 14 also claims "means for measuring power in the first and second shafts." These means are clearly linked to the sensors mentioned above, such as wheel speed sensors, shaft or half-axle speed sensors, and inner and outer rotor sensors. These sensors sense the speed of, and hence the controller can compute the power of, the first and second shafts of the claimed torque controller. Dependent Claim 16 claims directly some of the sensors which will accomplish these measurements.

Independent Claim 23 directly claims "a controller connected to the pump receiving signals indicative of a speed of the first and second rotors." Neither Gleasman nor Fukushima describe or suggest these required elements of independent Claims 1, 14, and 23.

In addition, Claim 23 recites a transfer assembly comprising a speed-up gear train. The Office Action cites no reference for the speed-up gear train. Fukushima does not disclose a transfer assembly, and the transfer assembly disclosed in Gleasman does not include a speed-up assembly. In fact, the gear or drive ratio between the control shafts and axle shaft of Gleasman, which corresponds to the drive ratio of the transfer assembly of the present invention, is stated to be preferably 1:1. Gleasman, col. 3, lines 31-32. As such, Gleasman specifically teaches away from the speed-up transfer assembly of the present invention.

Accordingly, the Applicants respectfully assert that Fukushima, alone or in combination with Gleasman, does not describe or suggest the claimed elements of Claim 23, and therefore, Claim 23 is allowable over Gleasman and Fukushima. Applicants further submit that claims 24 and 25 are allowable as depending, either directly or indirectly, from allowable independent Claim 23.

CONCLUSION

The Applicants assert that pending Claims 1-34 as amended are patentable. Applicants respectfully request the Examiner grant early allowance of these claims. The Examiner is invited to contact the undersigned attorneys for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,

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By: Dan L. Thompson
Registration No. P54,490
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610
Telephone: (734) 302-6000